

REMARKS

The Office Action issued November 10, 2008 has been received and carefully considered. The preceding amendments and following remarks are submitted as a full and complete response thereto.

Claims 1-23 are pending and under examination in this application. Claims 1, 3, 5, 11, 12, 14, 15, 17 and 19 have been amended. Claims 24 and 25 are new. No new matter has been added.

Claim Amendments

Independent claim 1 and claim 14 have been amended to recite a self-supporting plastic foil. Support for this amendment is found, *inter alia*, in paragraphs 32, 44, and 51. Applicants submit that a "self-supporting" foil is inherent in a "film [that] can be printed separately before it is incorporated into the laminate, and only be applied to the paper layer after the printing operation" as disclosed in paragraph 44. Applicants further submit that a "self-supporting" foil is inherent in a film which may be perforated, *inter alia*, by needle rollers before lamination of the film onto the paper as disclosed in paragraph 51. Applicants have also made corresponding amendments to dependent claims 3, 5, 11, 12, 17, and 19. Claims 1 and 14 are also amended to recite that the plastic foil has a thickness of 1 to 20 μm , preferably 6 to 15 μm . Support for this amendment is found, *inter alia*, at paragraph 33. No new matter is added.

Applicants have amended claim 12 to recite "a combined information pattern." Support for this amendment can be found, *inter alia*, in paras. 70-71 and 95-96 with reference to Figs. 7 and 8.

Claims 24 and 25 are new and recite "wherein the at least one paper layer has a weight of 50-100 g/m², preferably 80-90 g/m²." Support for new claims 24 and 25 is found, *inter alia*, in paragraph 15. No new matter is added.

Claim rejections under 35 U.S.C. § 112

Claims 1, 3, 5, 11, 12, 14, 15, 17 and 19 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. The Examiner contended that a foil embodies metal foils and plastic foils and that there is “nothing in the originally filed Specification that would teach one of ordinary skill [i]n the art that a metal foil can be used to coat the paper on both sides all over.” Applicants have amended the claims to recite “self-supporting plastic” foil as described above and submit that the claims as amended do not read on a metal foil. Therefore, Applicants submit that the grounds for the rejection have been overcome and request that the rejection be withdrawn.

Claims 1-13 and 20-23 were rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. The Examiner contended that the scope of the claims having the limitation “feel and sound of paper” was unclear. Applicants have amended claim 1 to remove this limitation and request that the rejection be withdrawn.

Claim 12 was rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite. The Examiner contended that the meaning of “self authentication” was unclear. Applicants have amended claim 12 to remove this term and request that the rejection be withdrawn.

Claim rejections under 35 U.S.C. § 102(b) or, alternatively, § 103(a)

Claims 1-3, 7-10, 13-15, 20 and 22 were rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent 5,868,902 to Howland et al. (hereinafter “Howland”). Applicants traverse the rejection because Howland fails to disclose or render obvious all elements of the claims.

At the outset, Applicants note that Howland is the national U.S. application of WO 96/28610, which was discussed and distinguished in the introduction of the present application. See para. 5.

Independent claim 1 from which claims 2-3, 7-10, 13, and 20-22 depend directly or through an intervening claim, recites a security paper for producing value documents, including a creasable, foldable, multilayer substrate and comprising at least one paper layer coated with self-supporting plastic foil on both sides all over, characterized in that at least the plastic foil is equipped with at least one security feature, the plastic foil has a thickness of 1 to 20 μm , preferably 6 to 15 μm .

Claim 14, from which claim 15 depends, recites a method for producing a creasable security paper according to claim 1, characterized in that at least one paper layer is produced in a paper machine, and then self-supporting plastic foil is applied to both surfaces of the paper layer all over, the plastic foil being already equipped with at least one security feature or equipped therewith after application, the plastic foil having a thickness of 1 to 20 μm , preferably 6 to 15 μm .

In contrast to the claimed invention, Howland describes performing aqueous dispersion to a paper. See, e.g., Howland, col. 2 ll. 55-56. Howland fails to disclose or render obvious a paper coated with a self-supporting plastic foil. Rather, Howland teaches that an aqueous coating formulation is applied using a "Meyer bar coater." See examples 1-5, and A. Moreover, Howland fails to disclose or suggest a plastic foil having a thickness of 1 to 20 μm , preferably 6 to 15 μm . Thus, Howland does not disclose and does not render obvious each and every element of claim 1, from which claims 2-3, 7-10, 13-15, 20 and 22 depend. Applicants respectfully request that the rejection be withdrawn, and claims 1-3, 7-10, 13-15, 20 and 22 be passed to issuance.

Claims 1, 3, 5, 8-10 and 13 were rejected under 35 U.S.C. § 102(b) as being anticipated by or, alternatively, under 35 U.S.C. § 103(a) as being obvious over U.S. Patent 4,455,359 to Pätzold et al. (hereinafter "Pätzold"). Applicants traverse the rejection because Pätzold fails to disclose or render obvious all elements of the claims.

Pätzold discloses a tamper-proof document (information carrier) consisting of a photographic material, e.g., photographic paper or film, which is coated on one or both sides with a transparent foil. See Abstract. Essentially, the foil serves as protection against forgery in that it is bonded to the information carrier in a way that makes it impossible to take apart the foil without destroying some information-bearing layer thereunder. See, e.g., claim 1. According to Pätzold, the information carrier can be made of paper. Col. 3 l. 44. However, the parameters of the weight of the paper (120 g/m², see col. 6 l. 23) and, in particular, the thickness of the plastic foil applied thereon (15 to 250 µm, preferably 50 to 200 µm, see col. 4 ll. 63-64) show that the resulting product will exhibit a certain stiffness, which, according to Pätzold, is more or less required for the disclosed information carrier. Col. 4 ll. 61-65. Moreover, the information carrier is laminated by means of a hardenable adhesive. See Abstract. In sum, Pätzold fails to disclose or render obvious a security paper or method for producing a security paper that is foldable and creasable as recited in claim 1 of the present application.

Furthermore, the foils taught by Pätzold essentially serve to protect the information carrier against forgery in that an information-bearing layer thereunder, which is inseparably connected to the foil and cannot be manipulated without being destroyed. In contrast, according to the present invention, the foils serve to prevent soiling of the paper substrate and to enhance the mechanical properties of the security paper, such as dimension stability and edge tear strength, without forgoing the known advantages provided by the paper substrate, such as feel, sound, foldability, and creasability.

Thus, Pätzold fails to disclose or render obvious each element of the claims and Applicants request that the rejection of claims 1, 3, 5, 8-10 and 13 be withdrawn and that claims 1, 3, 5, 8-10 and 13 be allowed.

Claim rejections under 35 U.S.C. § 103(a)

Claims 4-6, 16, and 21 were rejected under 35 U.S.C. § 103(a) as being obvious over Howland as evidenced by non-patent literature article entitled "Paper, Its making, merchenting and usage" by Haylock. Applicants traverse the rejection because Haylock fails to remedy the deficiencies of Howland as discussed above with regard to claim 1, from which claims 4-6, 16, and 21 depend directly or through intervening claims. The excerpt of Haylock provided by the Examiner fails to make any disclosure or teaching regarding plastic. Applicants request that the rejection of claims 4-6, 16 and 21 be withdrawn.

Claims 5, 11, 12 and 17-19 were rejected under 35 U.S.C. § 103(a) as being obvious over Howland in view of U.S. Pat. Application Pub. US 2002/0022112 to Hoeppner et al. (hereinafter "Hoeppner"). Applicants traverse the rejection because Hoeppner fails to remedy the deficiencies of Howland as discussed above with regard to claim 1, from which claims 5, 11, 12 and 17-19 depend directly or through intervening claims.

Hoeppner fails to cure these deficiencies because Hoeppner is concerned with plastic cards, not creasable foldable security paper. Additionally, one of ordinary skill in the art would not have combined Howland with Hoeppner, because Hoeppner is in a different field. In particular, Hoeppner is directed exclusively towards the production of cards including a plastic coating which permits subsequent personalization of the respective cards by printing, laser, embossing or the like. See claims 5-7, paras. 16, 26, 32, 38, 48, and 55.

Moreover, even if one were to coat a piece of paper as taught by Hoeppner, one would end up with a security card, since it is definitely not possible to maintain the properties of creasability and foldability as well as the feel and sound of paper after having applied a first plastic coating to both sides of the paper layer and, after printing

the same in order to apply further security features, having applied additional covering films or composite covering films on both sides of the already covered substrate. Paras. 16-20. Applicants stress that the plastic coating of Hoeppner is embossable because embossing requires material that can be raised to create a design. One of ordinary skill in the art would understand that to emboss a coating that will be subjected to further films would counteract the required properties of creasability and foldability. Therefore, Hoeppner actually teaches away from the presently claimed invention.

Therefore, Applicants respectfully request that the rejection be withdrawn, and claims 5, 11, 12 and 17-19 be allowed.

Claim 23 was rejected under 35 U.S.C. § 103(a) as being obvious over Howland in view of U.S. Published Application US 2003/0059636 to Nigam.

Claim 23 depends from independent claim 1 through intervening claim 7, and thus is allowable over Howland for at least the reasons above regarding claim 1. Nigam fails to cure the deficiencies of Howland because Nigam is merely directed to sizing paper and is not concerned with plastic foils. Applicants therefore request that the rejection of claim 23 be withdrawn.

Claims 2, 4, 6, 7, 14-16 and 20-22 were rejected under 35 U.S.C. § 103(a) as obvious over Pätzold in view of Howland and as evidenced by Haylock. Applicants traverse this rejection because Pätzold in view of Howland and as evidenced by Haylock fails to disclose or render obvious each of the limitations of these claims.

Claims 2, 4, 6, 7, 14-16 and 20-22 depend from independent claim 1 either directly or through intervening claims and are patentable over Pätzold and Howland individually for at least for the reasons given above with regard to claim 1. Moreover, the Examiner has not even attempted to make a *prima facie* case that the combination

of Pätzold and Howland discloses or renders obvious each of the limitations of claim 1. The Examiner simply states that "[t]he disclosures of Patzold et al and Howland et al are used as above." Haylock fails to remedy the deficiencies of Howland and Pätzold individually or in combination. The excerpt of Haylock provided by the Examiner fails to make any disclosure or teaching regarding plastic. Therefore, Applicants request that the rejection of claims 2, 4, 6, 7, 14-16 and 20-22 be withdrawn and that claims 2, 4, 6, 7, 14-16 and 20-22 be allowed.

Claims 5, 11, 12, and 17-19 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Patzold in view of Holand and further in view of Hoepfner. Applicants traverse this rejection because the references, singly or in combination, fail to disclose or render obvious each of the limitations of these claims.

Claims 5, 11, 12, and 17-19 depend from independent claim 1 either directly or through intervening claims and are patentable over Pätzold and Howland individually for at least for the reasons given above with regard to claim 1. Moreover, the Examiner has not even attempted to make a *prima facie* case that the combination of Pätzold and Howland discloses or renders obvious each of the limitations of claim 1. The Examiner simply states that "[t]he disclosures of Patzold et al and Howland et al are used as above." Hoepfner fails to remedy the deficiencies of Howland and Pätzold taken individually or in combination. Hoepfner fails to cure these deficiencies because, as discussed above, Hoepfner is concerned with plastic cards, not creasable foldable security paper. Therefore, Applicants request that the rejection of claims 5, 11, 12, and 17-19 be withdrawn and that claims 5, 11, 12, and 17-19.

Claim 23 was rejected under 35 U.S.C. § 103(a) as being obvious over Pätzold in view of Howland and further in view of Nigam. Applicants traverse the rejection of claim

23 because the references, singly or in combination, fail to disclose or render obvious all of the limitations of claim 23.

Claim 23 depends from independent claim 1 through intervening claim 7 and is patentable over Pätzold and Howland individually for at least for the reasons given above with regard to claim 1. Moreover, the Examiner has not even attempted to make a *prima facie* case that the combination of Pätzold and Howland discloses or renders obvious each of the limitations of claim 1. The Examiner simply states that "[t]he disclosures of Patzold et al and Howland et al are used as above." Nigam fails to remedy the deficiencies of Howland and Pätzold taken individually or in combination because Nigam is merely directed to sizing paper and is not concerned with plastic foils. Applicants therefore request that the rejection of claim 23 be withdrawn and that claim 23 be allowed.

In view of the foregoing, Applicants submit that all rejections and objections have satisfactorily been addressed. Accordingly, Applicants submit that this application is in condition for allowance and request that it be passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event that this paper is not timely filed, the Applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account No. 02-2135.

Respectfully submitted,

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